CLAIMS

1. Method for transmitting services with different media components and quality of service from a core network (CN) of a cellular telephone system towards a plurality of mobile stations traceable into a service area, the system employing physical resources for conveying signalling and traffic at the various interfaces (Iu, Iur, Iub, Uu) between the core network and the mobile stations (UE), **characterised in that** includes the steps of:

a) reserving an amount of physical resources on the whole service area for a period of interest to be used by the network for transmitting with higher priority services belonging to a selected subset of the whole transmissible real-time services with guaranteed bandwidth;

b) transmitting, by the network, repeated announcements into the service area to inform the subscribed users about the availability of a service which belongs to the selected subset;

c) transmitting by one or more subscribed users that are listening to the announcement a request to the network for joining a group of requesters for the announced service;

d) transmitting, by the network, a notification message towards the joined users for giving useful information on how to receive the announced service;

e) transmitting, by the network, the content of the announced service towards the joined users on a point-to-multipoint channel set-up in the cells of the service area.

2. The method of the claim 1, characterised in that the bandwidth of the reserved resources allows to transmit the announced service with at least the minimum bit-rate.

3. The method of the claim 1 or 2, characterised in that the reserved resources are usable by the network for transmitting non-real-time services with lower priority and

non-guaranteed bandwidth when not used for transmitting service content of said subset.

4. The method of one of the preceding claims, characterised in that during a period of interest for the availability of service, ongoing services of said subset have precedence on other real-time services of the same subset that need to be transmitted.

5. The method of one of the preceding claims, characterised in that the point-to-multipoint transmission is started at step e) even if there are zero recipients in the cell for the announced service.

6. The method of one of the preceding claims, characterised in that the service content is transmitted in parallel in different cells and the mobile stations is free of combining identical data transmitted from different cells.

7. The method of one of the preceding claims, characterised in that the period of interest is fixed.

8. The method of one of the preceding claims except the preceding one, characterised in that the period of interest is scheduled dynamically based on a service planning.

9. The method of one of the preceding claims, characterised in that the amount of reserved resource in the different cells of the service area is varied over time according to service planning and cell resource status.

10. The method of one of the preceding claims, characterised in that the network during the service content delivery at step e), for each involved cell, carries out the steps of:

- counting the subscribed users joined to the service of the transmitted content;
- comparing the counting result with a fixed threshold previously set-up for discriminating between the suitability of transmitting on a channel either

point-to-multipoint or point-to-point;

- switching towards the point-to-point channel if there are joined users but the counting result is lower than the threshold;
- terminating the transmission if there are no joined users.

11. The method of one of the preceding claims except the preceding one, characterised in that the network parallel to the service content delivery at step e), for each involved cell, carries out the steps of:

- checking whether there are joined users;
- switching from the point-to-multipoint channel to no transmission in case of no joined users.